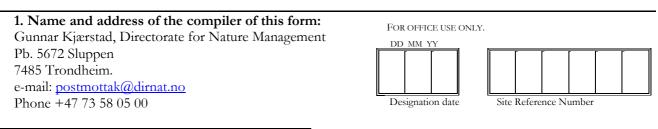
Information Sheet on Ramsar Wetlands (RIS) – 2009-2012 version

Available for download from http://www.ramsar.org/ris/key_ris_index.htm.

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

- 1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands.* Compilers are strongly advised to read this guidance before filling in the RIS.
- 2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 14, 3rd edition). A 4th edition of the Handbook is in preparation and will be available in 2009.
- 3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.



2. Date this sheet was completed/updated: April 2011

3. Country: Norway

4. Name of the Ramsar site:

The precise name of the designated site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parentheses after the precise name.

Hopen

5. Designation of new Ramsar site or update of existing site:

This RIS is for (tick one box only):

a) Designation of a new Ramsar site \boxtimes ; or

b) Updated information on an existing Ramsar site \Box

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area

The Ramsar site boundary and site area are unchanged: \Box

If the site boundary has changed:

i) the boundary has been delineated more accurately ; or ii) the boundary has been extended ; or iii) the boundary has been restricted**

and/or

If the site area has changed:

- i) the area has been measured more accurately ; or ; ii) the area has been extended ; or
- iii) the area has been reduced** \Box

** **Important note**: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

7. Map of site:

Refer to Annex III of the Explanatory Note and Guidelines, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

i) a hard copy (required for inclusion of site in the Ramsar List): 🗵;

ii) an electronic format (e.g. a JPEG or ArcView image) 🗵;

iii) a GIS file providing geo-referenced site boundary vectors and attribute tables \Box .

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The boundaries are the same as for the existing Hopen Nature Reserve. Apart from a small area around the meteorological station the whole island is protected as a nature reserve.

8. Geographical coordinates (latitude/longitude, in degrees and minutes):

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

76°30'N 25°01'E

9. General location:

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.

Hopen is an island in the south east part of the Svalbard Archipelago. Hopen is approx 34 km long and up to 2,5 km wide. The nearest town is Longyearbyen, on Spitsbergen, which is approximately 300 km to the North West (home to approximately 2100 inhabitants).

11. Area: (in hectares) 325400 ha (4600 ha land)

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Generally the site is characterized by a short period for vegetational growth, with less than 50 days between spring and autumn. The rich production in the sea is the basis for most of the bird- and mammal life, but also for plants and invertebrates, both directly and indirectly.

13. Ramsar Criteria:

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked.

1 •	2 •	3 •	4•	5•	6•	7	8 • 9
X	X	X	X	X	X		

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

(Capitalized letters show the species' status on the Norwegian Red List)

Criterion 1

Hopen is a representative arctic island with a rich avian community, particularly among cliff nesting species.

Criterion 2

The site supports a number of threatened bird species. For details see justification of Criterion 5. It also supports the Svalbard poppy *Papaver dahlanum* (VU).

Criterion 3

Hopen is important for maintaining the bird population in the southeastern part of Svalbard. (see criterion 5)

Criterion 4

The site is especially important for cliff nesting birds. For details please see justification of criterion 5.

Criterion 5

Cliff nesting bird species dominate the wildlife on the island. Black-legged Kittiwakes *Rissa tridactyla* - approx 40.000 breeding pair (EN) and Brünnich's guillemots *Uria lomnia* (VU) (Approx 170.000 birds in breeding season) are the most abundant, but Northern Fulmar *Fulmarus glacialis* (NT)– 5000 breeding pairs, Black Guillemot *Cepphus grille* (VU) - approx 1000 pairs breeding, Little Auk *Alle alle* (5000 breeding pairs), Atlantic puffin *Fratercula arctica* (VU) and Glaucous Gull *Larus hyperboreus* (NT) (approx 1000 pairs breeding), also occur here. Most of the cliffs are situated in the south of the island, along Iversenfjellet, Werenskioldfjellet and Kollerfjellet. However, the largest bird cliff is located in the north of the island, on Nørdstefjellet. Other bird species on the island include the Arctic Skua, Great Skua and Purple Sandpiper. Common eiders occur, but in low numbers.

Criterion 6

The site supports 40.000 breeding pairs of Rissa tridactyla and thus supports more than 4% of the East Atlantic population.

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

- 1. Arctic polar desert zone.
- 2. Arctic

b) biogeographic regionalisation scheme (include reference citation):

The zonal division assigned is based on the distribution of thermophilius vascular plant species.
 Vascular plants, which are abundant on Svalbard are divided into five groups based on their temperature requirements. The distributions of these groups of species have been surveyed in 163 areas (In: Elvebakk, A. (1997): Tundra diversity and ecological characteristics of Svalbard. In: Wiegolaski, F.E. (ed.): Polar and alpine tundra. Ecosystems of the world 3: 347-359. Elsevier.
 Biogeographical Regions, European Environment Agency, 2005

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Geology	The bedrock is from the Triassic and consists mostly of sedimentary rocks such as grit, siltstone and shale. These rocks were formed by deposits in estuaries and in shallow shelf areas in the sea. During the Triassic and Jurassic, plant and animal life were abundant here, as indicated by the fossils yielded by the deposits. Oil may occur at deeper levels, but exploratory wells failed to find any.
Geomorphology	About 38 km in length, and only 1.5 km wide on average (2.5 at its widest), the island of Hopen resembles a backbone emerging from the sea. The whole area is 46 km2. Apart from a few scattered coastal plains, there is a very narrow beach that surrounds the entire island, from which the landscape rises. At the top of the island there are steep cliffs with horizontal shelves, which are ideal for breeding seabirds. Several mountain plateaus occur on the top of the island. Four valleys and passes cut through the mountain ridge in an east–west direction.
Water quality	There are no rivers or lakes at Hopen, only smaller creeks. All freshwater came from snow melting and rain. In the winter all freshwater is frozen.
Climate	The climate is characterised by low temperatures and low precipitation. Theaverage temperature in July is 1,9 °C. Annual average temperature is -6,4 °C. Only in July, August and September are average temperatures over 0 °C (1,9 – 2,3 and 0,7 °C) Annual precipitation is 476 mm.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

Because of a harsh climate with large erosion effects from wind, waves and sea ice most of the surface is covered by rocks. The most heavily vegetated area are located under bird cliffs, where guano provides nutrients (in particular nitrogen) that enhances plant growth. The island has continuous permafrost where only the upper parts melt during the summer.

The climate is cold and dry with annual average temperature at -6.4 $^{\rm O}$ C, and average precipitation of 476 mm.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

There are no lakes or rivers in the island, only small creeks running into the sea. The erosion done by freshwater is therefore minimal. The climate is harsh and ocean waves and sea ice have an erosion effect on coastal areas. Bird cliffs are considered to be important in the nutrient flow between the ocean and land.

19. Wetland Types

a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the *Explanatory Notes & Guidelines*.

Marine/coastal:	<u>A</u> • I	3 • C	• <u>D</u> • E	• F	• $\mathbf{G} \cdot \mathbf{H} \cdot \mathbf{I} \cdot \mathbf{J} \cdot \mathbf{K} \cdot \mathbf{Z} \mathbf{k}(\mathbf{a})$
			О•Р• Хр•Ү•	-	R • Sp • Ss • Tp Ts • U • Va • Zk(b)
Human-made: 1	• 2	• 3	• 4 • 5	• 6	• 7 • 8 • 9 • Zk(c)

b) dominance:

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

D, A

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Situated in the Arctic and characterized by:

- Island with several bird cliffs. Rock or sand/gravel dominated shores.
- Sparse grass vegetation.
- The island is usually icebound during winter
- Earlier Hopen was a very important denning site for Polar Bear, but because of the ice condition in recent years the situation has changed.

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

The vegetation at Hopen belongs to the Arctic polar desert zone, characterized by the Svalbard poppy *Papaver dahlianum* (VU). Another interesting species are *Draba micropetala* which is listed as NT in the national red list. There is no specified description of the flora and vegetation at Hopen.

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS*.

Birds

See 14.

Hopen is on BirdLife International's list of important bird areas in Europe. Site number SJ012 Hopen island

Mammals

Hopen is an important migration and denning area for polar bears. The number of dens varies. Previously, winters with poor ice conditions prior to Christmas have meant there have been no dens at all, whereas winters with early ice have brought as much as 36 dens (1996). Since 2005 there has been no ice around Hopen before Christmas. It is probable that no female polar bears have had birthing dens here during this time. According to annual registrations carried out at Hopen's meteorological station since 1976, there have normally been between 150-300 polar bear visits each winter in the period of 1983–2001.

South on the island (Koefoedodden) there is a traditional resting place for walrus .

23. Social and cultural values:

a) Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

Trappers have used the island in the 19th century and there are several huts, traps and other cultural values showing their activities. Five trapper huts are protected cultural heritage sites.

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning?

If Yes, tick the box 🗖 and describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:
a) within the Ramsar site:
State owned
b) in the surrounding area:
State owned
25. Current land (including water) use:
a) within the Ramsar site:
None

b) in the surroundings/catchment:

In the middle of the island there is a small area that is not included in the Ramsarsite. Here we find a meterological station.

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects: a) within the Ramsar site:

Climate change and its effects in the Arctic may be the most serious environmental issue threatening the Arctic environment (see also the changes in the abundance of polar bears described under point 22.)

b) in the surrounding area:

Oil spill from ships and oil/gas development projects in this part of the Arctic is a possible threat.

27. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

The boundaries are the same as for the existing Hopen Nature Reserve. Hopen is on BirdLife International's list of important bird areas in Europe. Site number SJ012 Hopen island

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia \boxtimes ; Ib \square ; II \square ; III \square ; IV \square ; V \square ; VI \square

c) Does an officially approved management plan exist; and is it being implemented?: A management plan exists. The management plan was implemented in 2007. A copy of the Management Plan (in Norwegian) was provided to the Secretariat together with this RIS.

d) Describe any other current management practices:

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

None

29. Current scientific research and facilities:

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

From 1994 there has been intensive research on polar bear. There is also a meteorological station at the island.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

No such activities have been conducted, mainly because of the remoteness of the area and difficult access.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Hopen is rarely visited by tourists (60 tourists from costal expedition cruise boats landed on Hopen in 2009), however recreational activities among the station

crew (Meteorological station) commonly include both hiking and use of recreational cabins.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.

Norwegian Directorate for Nature Management (DN), Tungasletta 2, 7485 Trondheim Ph +47 73580500 Fax +47 73580501 Email: postmottak@dirnat.no

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

This site is managed by the Governor of Svalbard which is under the instruction of DN. Address: Governor of Svalbard, Pb 633, 9171 Longyearbyen, Norway. Phone 47 79 02 43 00 Email: <u>postmottak@sysselmannen.no</u>

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Bakken, V. & Mehlum, F. 1988. AKUP - *Sluttrapport Sjøfuglundersøkelser nord for* 74N/Bjørnøya. Norsk Polarinstitutt. Rapportserie nr. 44.

Elvebakk, A. 1989: Biogeographical zones of Svalbard and Jan Mayen based on the distribution patterns of thermophilous vascular plants. Upubl. manuskript, Universitetet i Tromsø.

Kålås, J.A., Viken, Å. og Bakken, T. (red.) 2006. Norsk Rødliste 2006 – 2006 Norwegian Red List. Artsdatabanken, Norway

Sysselmannen 2007, Forvaltningsplan Hopen naturreservat 2007-2011. Sysselmannen på Svalbard.

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